

I. CLAIM

1. In an aircraft servicing pit latch mechanism for holding and releasing a pit lid removably mounted atop a subsurface aircraft servicing pit, wherein said pit lid has an upper surface and an undersurface and said pit has an upright wall, and including a catch member depending from said underside of said pit lid and mounted for rotational movement relative thereto about a catch member axis, and a latch member located on said upright wall adjacent said catch member and engageable therewith, the improvement wherein one of said catch and latch members is provided with a plurality of vertically spaced teeth alternatively and selectively engageable by the other of said catch and latch members.

2. An aircraft servicing pit latch mechanism according to Claim 1 wherein said one of said catch and latch members that is provided with said plurality of teeth is said latch member.

3. An aircraft servicing pit latch mechanism according to Claim 2 further including a spring that biases said catch member toward engagement with said latch member and a lever mounted for rotational movement on said pit lid for disengaging said catch member from said latch member.

4. An aircraft servicing pit latch mechanism according to Claim 2 wherein said catch member is a gravity operated device that is biased toward engagement with said latch member by the force of gravity and which includes a lever arm for disengaging said catch member from said latch member.

5. An aircraft servicing pit latch mechanism according to Claim 1 comprising at least three of said vertically spaced teeth.

6. In a latching mechanism for a pit having an upright interior wall and buried beneath a surface across which aircraft travel and having a pit lid removably securable upon an upwardly facing seat atop said pit above said interior wall and in which a catch having a hook is suspended from said pit lid and mounted to said pit lid upon an axis for rotational movement toward and away from said pit wall, the improvement wherein a latch member having a plurality of vertically separated latching teeth directed toward said catch is mounted upon said pit wall, whereby said catch is selectively and alternatively engageable with each of said latching teeth, depending upon the extent to which said pit lid is forced downwardly upon said seat.

7. A latching mechanism according to Claim 6 comprising at least three of said vertically spaced teeth.

8. A latching mechanism according to Claim 6 further comprising a spring that biases said catch toward engagement with said latch member and a lever mounted for rotational movement on said pit lid for disengaging said catch from said latch member.

9. A latching mechanism according to Claim 6 wherein said catch is a gravity operated device biased toward engagement with said latch member by the force of gravity and further comprising a lever arm for disengaging said catch member from said latch member.

10. A latch mechanism for a subsurface aircraft ground servicing chamber formed by a pit having an upright interior wall and a pit lid removably disposed atop said pit comprising: a catch member depending from said pit lid adjacent said wall and mounted to said pit lid for rotatable movement relative thereto about a catch axis of rotation, and a latching member mounted on said pit wall and having a plurality of vertically spaced teeth thereon facing said catch member, and said catch member has a hook facing said latching member, and said hook is alternatively engageable with each of said teeth, depending upon the extent to which said pit lid is pressed downwardly toward said pit.

11. A latch mechanism according to Claim 10 comprising at least three of said vertically spaced teeth.

12. A latch mechanism according to Claim 10 further comprising a biasing spring that urges said catch member toward engagement with said latching member and a lever mounted for rotational movement on said pit lid for disengaging said catch member from said latching member.

13. A latch mechanism according to Claim 10 wherein said catch member is a gravity operated device that is biased toward engagement with said latching member by the force of gravity and which includes a lever arm for disengaging said catch member from said latch member.

14. A latch mechanism according to Claim 13 wherein said catch member has a hook directed away from said upright wall and said latching member includes a latch

bar with said teeth defined thereon and supported by a pair of spacing posts and bolts that pass through said spacing bolts to secure said latch bar to said upright wall in spaced separation therefrom with said catch member depending from said pit lid between said latch bar and said upright wall.

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